

WHAT IS CLAIMED IS:

1. A method of winding an optical fiber on a reel,
utilizing the optical fiber having the following

5 characteristics:

a cable cutoff wavelength of 1260 nm or less,

a zero dispersion wavelength is outside a wavelength
range of 1530 to 1565 nm,

an absolute value of the dispersion value in the
10 entire wavelength range of 1530 to 1565 nm is in a range
of 2 to 14 ps/nm/km, and

a bending loss at a wavelength of 1550 nm is in a
range of 1 to 100 dB/m, when wound at a diameter of 20 mm;
and

15 the reel with a barrel diameter of not less than 100
mm and not more than 200 mm; characterized by winding the
optical fiber on the reel so that a transmission loss of
the optical fiber after winding on the reel is 0.25 dB/km
or less at the wavelength of 1550 nm, and an increase of
20 a transmission loss of the optical fiber is 0.03 dB/km or
less at the wavelength of 1550 nm, after the optical
fiber is wound on the reel at a length of approximately
25 km.

25 2. The method of claim 1, wherein the optical fiber
wound on the reel does not substantially loosen its
winding by visually checked, after dropped in the
direction of the center axis of the reel from a height of
75 cm.

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3. The method of claim 1, wherein the optical fiber has two or more annular regions between a central region and a clad, and the minimum relative refractive index difference of at least one annular region is negative.

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4. The method of claim 2, wherein the optical fiber has two or more annual regions between a central region and a clad, and the minimum relative refractive index difference of at least one annular region is negative.

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